



JavaOne Trip Report

Jeremy Jones

Jeremy.E.Jones@gsfc.nasa.gov

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Agenda

- Introduction
- Important Announcements
- The Java Ring
- JDK Roadmap
- Java APIs
- Developer Tips
- Cool New Products

What is JavaOne?

- THE premiere Java developer conference
- Started in 1996
- March 24 - 27, 1998, San Francisco, CA
- Over 100 one-hour sessions
- Over 200 exhibitors
- 14,000 attendees

Conference Themes

- The “Java Platform”
- Java in consumer devices, smart cards
 - The Java Ring
- Java in mission-critical applications
- New focus on performance, stability, compatibility

Important Announcements

- JDK 1.2 beta 3
- Embedded Java specification
- Java 3D alpha release
- Java Media Framework release
- Java JumpStart
- Visual Café 2.5
- JBuilder 2



The Java Ring



- Contains a tiny Java Virtual Machine
- Implements the JavaCard 2.0 API
- Built by Dallas Semiconductor
- Stores information in NVRAM (6K)
- Runs applets
- Includes microprocessor, memory, clock and battery

JDK Roadmap

- JDK 1.1.6 release in April
 - Performance improvements
- Will continue with 1.1.x releases
 - 1.1.7 and 1.1.8 by end of year
- JDK 1.2 Final due Fall '98
 - Beta 3 released, beta 4 in summer
- HotSpot beta late summer
 - Independent of JDK release
 - Requires JDK 1.2 pluggable VM architecture

JDK 1.2

- Java Foundation Classes (JFC)
 - Swing UI components
 - Java 2D
 - Drag and drop
- Security Enhancements
 - Fine-grained access control
- Collections
- JavaBeans Enhancements
- Extensions Framework

JDK 1.2

- Version Control for Packages
- Java IDL
- JAR Enhancements
 - JAR Input/Output Streams
- Javadoc Improvements
 - Doclets
- Performance Improvements
 - Faster garbage collection
 - JIT compilers built-in

The Java Foundation Classes

- Swing
 - New set of lightweight GUI components
 - Pluggable look-and-feel
- Java 2D
 - Advanced 2D graphics and imaging
- Accessibility
- Drag and Drop
 - Within VM, between VMs, to/from native

Java 2D

- Comprehensive API for sophisticated 2D graphics
- Built on existing AWT graphics
- Very nice design
- Complex line styles
- Paint with arbitrary textures, gradients
- Transform any 2D object (incl. Text)
 - Translation, rotation, scaling, shearing

Java 2D

- Compositing
 - Alpha blending
- Antialiasing
- Clipping region any shape
- Directly manipulate image data
- Robust font support
- Better printing support

Java Advanced Imaging API

- Standard extension, not part of core JDK
- Built on Java 2D
- Immediate and pipelined image rendering
- Tiling for very large images
- Many more image operations
- Arbitrary coordinate systems
- TIFF and FlashPix support
- Client-server imaging
- Specification in April, release not yet set

JavaHelp API

- Standard extension, not part of core JDK
- Standard help viewer, navigator components (TOC, Index, Find)
- Content is HTML 3.2 with embedded Swing components
- Context-sensitive help
- API, not an authoring tool
- Early access release in April

Java Blend

- Separate product (tools and API)
- Maps relational database tables to/from Java objects
- Built on JDBC
- Developers manipulate database through Java objects
 - Eliminates need for SQL

Developer Tips

- Ctrl-Break to dump stack trace
- Ctrl-Shift-F1 to dump GUI hierarchy
- `JComponent.putClientProperty()`
 - ex. `"JTree.lineStyle" = "Horizontal", "Angled", or "None"`
- Inherit directly from `Component` for lightweight custom components
- Override `isOpaque()` to return true
- Use `GlassPane` to disable user input
- Override `paintComponent()` instead of `paint()`

Cool New Products

- Together/J <http://www.oi.com/>
 - 100% Pure Java UML modeling tool
- JavaPureCheck (free) <http://www.suntest.com/100percent/>
 - Code analyzer for the 100% Pure Java program
- Dash-O Pro <http://www.preemptive.com/>
 - Class file optimizer
- InstallShield for Java <http://www.installshield.com/java/>
- InstallAnywhere <http://www.ZeroG.com/>
 - Java installer toolkits
- JProbe <http://www.klg.com/jprobe/>
 - Java code profiler
- Advisor/J 2.0 <http://www.neurondata.com/>
 - 100% Pure Java expert system engine with rule builder IDE

More URLs

- The JavaOne Home Page
 - *<http://www.javasoft.com:81/javaone/>*
- JDK 1.2
 - *<http://www.javasoft.com:81/products/jdk/1.2/>*
- The Swing Home Page
 - *<http://java.sun.com/products/jfc/swingdoc-current/index.html>*
- The JavaSoft Products Page
 - *<http://www.javasoft.com:81/products/index.html>*
- Dallas Semiconductor (the Java Ring)
 - *<http://www.ibutton.com>*